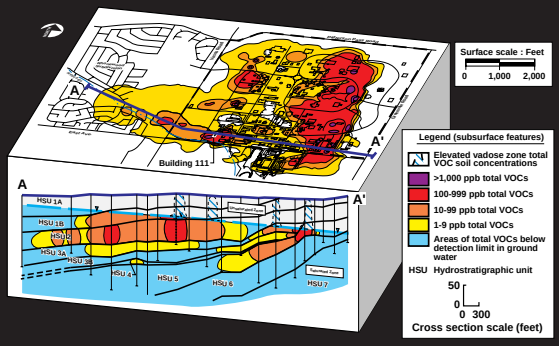
Groundwater Restoration Projects at LLNL

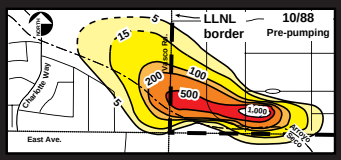
LLNL's strategy is to target contaminants through extensive characterization and to remove them with carefully engineered systems. One example is engineered plume collapse. LLNL's approach of using science-based restoration is unique.

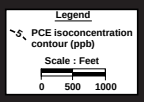
Distribution of contaminants at LLNL

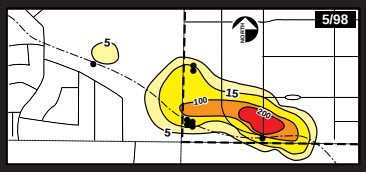


LLNL's strategy is to target contaminants through extensive characterization and remove them with carefully engineered systems (engineered plume collapse)

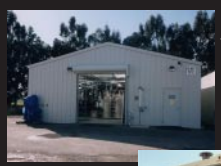
Significant cleanup progress





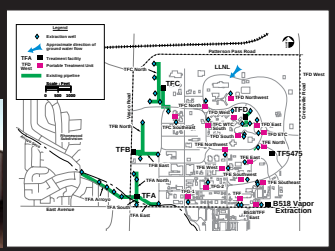


Engineering is contributing in three areas essential to the Environmental Restoration Program's cleanup success



Fixed treatment unit

Portable treatment unit

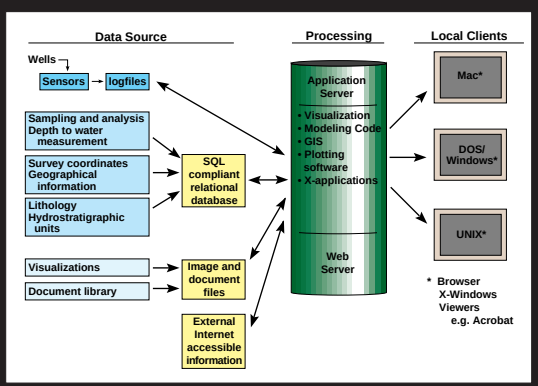


We engineered portable treatment units that are saving $10M relative to fixed treatment systems and pipelines

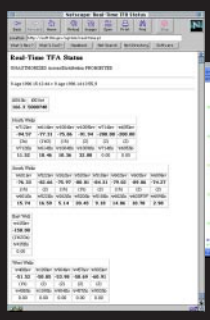
View of the steam remediation system at the Visalia Pole Yard, Visalia, California.

Mechanical technician Allen Elholz records operational data at one of the steam-injection wells

The restoration program's Intranet architecture provides rapid and platform-independent data access.

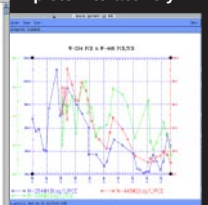


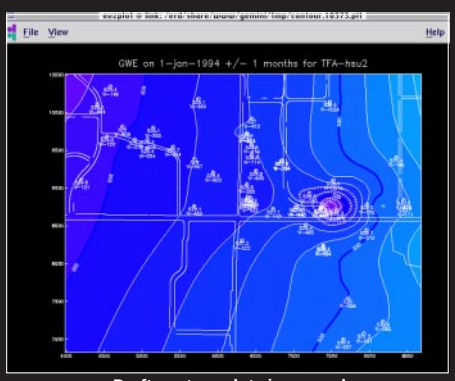
Intranet architecture



View treatment facility's real-time status

View time series plots interactively





Draft contour plots in seconds

Engineering
Lawrence Livermore National Laboratory
September 1998